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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/782,754	RABIPOUR ET AL.	
	Examiner	Art Unit	
	WUTCHUNG CHU	2468	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/3/2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20,22 and 23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20,22 and 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This communication is in response to application's amendment filed on 12/3/2010. Claims 1-20 and 22-23 are pending, and claim 21 is cancelled.

Claim Rejections - 35 USC § 103

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al., hereinafter Shaffer, (US6324409) in view of Harada (US7240000), and further in view of Witzel et al., hereinafter Witzel, (US2010/0305943).

Regarding claims 1, 16, and 17, Shaffer disclose a system and method for optimizing telecommunication signal quality **(see Shaffer col. 2 lines 18 to col. 3 lines 15 and Program instruction col. 4 line 18)** comprising:

- a first interface for exchanging data with a first neighboring entity **(see Shaffer figure 2 box 202 gateway and col. 6 line 8 which interfaces with box 200 TOL client)**;
- a second interface for exchanging data with a second neighboring entity **(see Shaffer figure 2 box 202 gateway and col. 6 lines 8-10 second interface of gateway connect to box 204 PBX)**;
- a memory for storing codec information regarding said communication apparatus **(see Shaffer col. 8 lines 64 to col. 9 lines 10)**;
- a control entity operative to detect a first message from the first neighboring entity via the first interface, the first message being indicative of codec information regarding an originating entity **(see Shaffer figure 4 box 400 and 404 signaling message then collects at least one capability (signal coding and compression) of the receiver)**;
- responsive to detection of the first message, the control entity being operative to perform an assessment of compatibility between the codec information regarding the originating entity and the codec information regarding said communication apparatus **(see Shaffer figure 4 boxes 406 and 408 determining an end-to-end coding scheme)**;
- responsive to the assessment **(see Shaffer col. 7 lines 1-14 the signaling message then collects at least one telecommunication signal coding or compression capability of at least one intermediary station and figure 4 step 402),** and self-identify the communication apparatus as a candidate **(see Shaffer**

col. 2 lines 29-40 each entity or device capable of converting voice coding between the sender and the receiver identifies its capabilities to the signaling message and col. 7 lines 12 when the signaling capabilities of a station, the station may list its capabilities onto the signaling message);

Shaffer disclose all the subject matter of the claimed invention with the exception of:

- after a call is established;
- compatibility being positive, the control entity being operative to
- for terminally supporting a subsequent codec-bypass negotiation with the originating entity;
- compatibility being negative, the control entity being operative to
- for non-terminally supporting a subsequent codec-bypass negotiation with the originating entity.

Harada from the same or similar fields of endeavor teaches the use of:

- Determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication **(see Harada figure 7 boxes 11-13 and col. 7 lines 22-44),** and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as being negative.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the determination if using the same coding **(see Harada figure 7 boxes 11-13 and col. 7 lines 31-44)** and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as

being negative as taught by Harada and in the system and method for optimizing telecommunication signal quality of Shaffer in order to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Witzel from the same or similar fields of endeavor teaches the use of:

- controlling the establishment or modification of a connection for a subscriber having a subscription in a communication network is provided, which connection is to be established or modified between nodes that are adapted to employ a coding scheme selected from a plurality of supported coding schemes potentially affecting connection quality **(see Witzel paragraph 10)**.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the establishment or modification of a connection **(see Witzel paragraph 10)** as taught by Witzel and in the modified system and method for optimizing telecommunication signal quality of Shaffer and Harada in order to maintain compressed voice saves core network bandwidth and optimizes speech quality **(see Witzel paragraph 4)**.

Regarding claim 2, Shaffer, Harada, and Witzel teach further comprising: responsive to the assessment **(see Shaffer col. 7 lines 1-14 the signaling message then collects at least one telecommunication signal coding or compression capability of at least one intermediary station and figure 4 step 402)** of compatibility being positive **(see Harada figure 7 boxes 11-13 and col. 7 lines 31-44 and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as being negative)**, the control entity being

further operative to release a second message towards the first neighboring entity via the first interface **(see Shaffer figure 4 box 410 send another message instructing intermediary stations to follow end-to-end coding scheme for the call)**, the second message being indicative of the communication apparatus being self-identified as a candidate **(see Shaffer col. 2 lines 29-40 each entity or device capable of converting voice coding between the sender and the receiver identifies its capabilities to the signaling message and col. 7 lines 12 when the signaling capabilities of a station, the station may list its capabilities onto the signaling message)** for terminally supporting a subsequent codec-bypass negotiation with the originating entity **(see Harada figure 7 boxes 11-13 and col. 7 lines 31-44)**. The motivation to do so is to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Regarding claim 3, Shaffer and Witzel disclose all the subject matter of the claimed invention with the exception of:

- responsive to absence of any message from the second entity indicative of the second entity being self-identified as a candidate for terminally supporting a subsequent codec-bypass negotiation with the originating entity, effecting said subsequent codec-bypass negotiation with the first entity.

Harada from the same or similar fields of endeavor teaches the use of:

- indication of whether it is the same type or not for coding-bypass communication or tandem communication **(see Harada figure 7 boxes 11-13 and col. 7 lines 31-44)** and it would have been obvious to one of ordinary skill in the art at the time of the

invention to use the absence of any message as indicative of terminally supporting codec-bypass.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the indication of whether the same type of coding in the codec-bypass operation **(see Harada figure 7 boxes 11-13 and col. 7 lines 31-44)** as taught by Harada in the modified system and method for optimizing telecommunication signal quality of Shaffer and Witzel in order to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Regarding claim 4, Shaffer, Harada, and Witzel teach further comprising: the control entity being operative to forward the first message to the second remote entity via the second interface **(see Shaffer figure 5 boxes 504 and 506 and col. 7 lines 50-65)**.

Regarding claim 5, Shaffer, Harada, and Witzel teach the first and second interfaces
are packet interfaces **(see Shaffer col. 8 lines 56-63)**.

Regarding claim 6, Shaffer, Harada, and Witzel teach the first interface is a packet interface **(see Shaffer col. 8 line 61)** and the second interface is a circuit-switched interface **(see Shaffer col. 6 lines2-26 and col. 8 line 24)**.

Regarding claim 7, Shaffer, Harada, and Witzel teach the first and second interfaces are circuit-switched interfaces **(see Shaffer col. 8 line 27).**

Regarding claim 8, Shaffer, Harada, and Witzel teach the - detect a second message received from the second neighboring entity, the second message being

indicative of the second neighboring entity apparatus being self-identified as a candidate for **(see Shaffer col. 2 lines 29-40 each entity or device capable of converting voice coding between the sender and the receiver identifies its capabilities to the signaling message and col. 7 lines 12 when the signaling capabilities of a station, the station may list its capabilities onto the signaling message)** terminally supporting a subsequent codec-bypass negotiation with the originating entity **(see Harada figure 7 boxes 11-13 and col. 7 lines 22-44 Determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as being negative)**;

responsive to detection of the second message, self-identify the communication apparatus as a candidate **(see Shaffer col. 2 lines 29-40 each entity or device capable of converting voice coding between the sender and the receiver identifies its capabilities to the signaling message and col. 7 lines 12 when the signaling capabilities of a station, the station may list its capabilities onto the signaling message)** for non-terminally supporting a subsequent codec-bypass negotiation with the originating entity **(see Harada figure 7 boxes 11-13 and col. 7 lines 22-44 Determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as being negative)**. The motivation to do

so is to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Regarding claim 9, Shaffer, Harada, and Witzel teach the further comprising: the control entity being operative to forward the second message to the first remote entity via the first interface **(see Shaffer figure 5A box 510 Gateway y sends a second signaling message to gateway X to inform gateway x of client B's and intermediate stations' capabilities and col. 7 lines 66 to col. 8 lines 16)**.

Regarding claim 10, Shaffer, Harada, and Witzel teach the further comprising: the control entity being further operative to monitor messages exchanged via the first and second interfaces that are indicative of negotiation **(see Shaffer col. 8 lines 64 to col. 9 lines 27 and col. 4 lines 5-11)** of a codec-bypass connection between the originating entity and an entity different from the originating entity **(see Harada figure 7 boxes 11-13 and col. 7 lines 31-44)**. The motivation to do so is to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Regarding claim 11, Shaffer, Harada, and Witzel teach the control entity is further operative to:
detect success or failure of said first negotiation; and responsive to failure of said first negotiation **(see Shaffer figure 6B box 654 is there a result with no transcoding and boxes 656 and 658 determining if there is a codec-bypass/transcoding-free operation and figure 5A box 513 send a third signaling message to inform all stations of coding scheme)**, and if the communication apparatus is self-identified as a candidate for **(see Shaffer col. 2 lines 29-40 each entity or device capable of**

converting voice coding between the sender and the receiver identifies its capabilities to the signaling message and col. 7 lines 12 when the signaling capabilities of a station, the station may list its capabilities onto the signaling message) terminally supporting a subsequent codec-bypass negotiation with the originating entity, negotiate with the originating entity a codec-bypass connection between the communication apparatus and the originating entity **(see Harada figure 7 boxes 11-13 and col. 7 lines 22-44 Determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as being negative)**. The motivation to do so is to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Regarding claim 12, Shaffer, Harada, and Witzel teach further comprising: responsive to success of said first negotiation, and if the communication apparatus is self-identified as a candidate or terminally supporting a subsequent codec-bypass negotiation with the originating entity **(see Shaffer figure 6B box 654 is there a result with no transcoding and boxes 656 and 658 determining if there is a codec-bypass/transcoding-free operation and figure 5A box 513 send a third signaling message to inform all stations of coding scheme)**, the control entity being operative to self-identify the communication as a candidate for **(see Shaffer col. 2 lines 29-40 each entity or device capable of converting voice coding between the sender and the receiver identifies its capabilities to the signaling message and col. 7 lines 12**

when the signaling capabilities of a station, the station may list its capabilities onto the signaling message) non-terminally supporting a codec-bypass negotiation with the originating entity **(see Harada figure 7 boxes 11-13 and col. 7 lines 22-44 Determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as being negative)**. The motivation to do so is to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Regarding claim 13, Shaffer, Harada, and Witzel teach negotiation being a first negotiation, wherein the control entity is further operative to: detect success or failure of said first negotiation; and responsive to success of said first negotiation **(see Shaffer figure 6B box 654 is there a result with no transcoding and boxes 656 and 658 determining if there is a codec-bypass/transcoding-free operation and figure 5A box 513 send a third signaling message to inform all stations of coding scheme)**, and if the communication apparatus is self-identified as a candidate **(see Shaffer col. 2 lines 29-40 each entity or device capable of converting voice coding between the sender and the receiver identifies its capabilities to the signaling message and col. 7 lines 12 when the signaling capabilities of a station, the station may list its capabilities onto the signaling message)** or terminally supporting a subsequent codec-bypass negotiation with the originating entity, the control entity being operative to self-identify the communication as a candidate for non-terminally supporting a codec-

bypass negotiation with the originating entity **(see Harada figure 7 boxes 11-13 and col. 7 lines 22-44 Determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as being negative)**. The motivation to do so is to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Regarding claim 14, Shaffer, Harada, and Witzel teach the originating entity is an endpoint gateway **(see Shaffer col. 8 line 8 sender's gateway and figure 2 box 202)**.

Regarding claim 15, Shaffer, Harada, and Witzel teach the originating entity is an in-path gateway **(see Shaffer col. 6 lines 23-29)**.

5. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al., hereinafter Alperovich, (US6600738) in view of Harada (US7240000), and further in view of Witzel et al., hereinafter Witzel, (US2010/0305943).

Regarding clams 18, Alperovich discloses a routing in an IP network based on codec availability and subscriber preference **(see Alperovich col. 1 line 52 to col. 2 line 51)** comprising:

- identifying a target in-path gateway from among the plurality of in-path gateways **(see Alperovich figure 5 and col. 6 lines 22-38 the possible pathways which may include not only the gateway(s) or paths chosen, but also the nodes between the end destination and the chosen gateway(s))**,

- the target in-path gateway being the in-path gateway furthest along the path from the first gateway **(see Alperovich figure 5 and col. 6 lines 22-38 a call to be placed over the core IP network 16 of figure 1 for as long as possible)**

Alperovich discloses all the subject matter of the claimed invention with the exception of:

- which is characterized by codec-bypass connection compatibility with the first gateway;
- establishing a codec-bypass connection between the first gateway and the target in-path gateway.

Harada from the same or similar fields of endeavor teaches the use of:

- when mobile terminals belonging to different mobile communications systems communicate with each other, a communications path is established through gateways which interconnect the two mobile communications systems. Even if the mobile communications systems employ the same speech coding process, a signal passing through a transit network is converted by a general-purpose speech coding process such as 64 kPCM unless the gateways and the transit network are compatible with the speech coding process of the mobile communications systems **(see Harada col. 1 lines 15-25)**;
- determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication **(see Harada col. 7 lines 9-44 and figure 7 boxes 11-13);**

- establish the bypass connection from the time a call is made **(see Harade col. 9 lines 17-67).**

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the same coding type and establishing a codec bypass connection as taught by Harada in the routing in an IP network based on codec availability and subscriber preference of Alperovich in order to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Witzel from the same or similar fields of endeavor teaches the use of:

- controlling the establishment or modification of a connection for a subscriber having a subscription in a communication network is provided, which connection is to be established or modified between nodes that are adapted to employ a coding scheme selected from a plurality of supported coding schemes potentially affecting connection quality **(see Witzel paragraph 10)**.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the establishment or modification of a connection **(see Witzel paragraph 10)** as taught by Witzel and in the modified the routing in an IP network based on codec availability and subscriber preference of Alperovich and Harada in order to maintain compressed voice saves core network bandwidth and optimizes speech quality **(see Witzel paragraph 4)**.

Regarding claims 19, Alperovich, Harada, and Witzel teach further comprising: performing a determination of whether the target in-path gateway is involved in a prior codec-bypass connection with the second gateway **(see Harada col. 7 lines 9-44 and**

figure 7 boxes 11-13 and col. 1 lines 15-25); wherein performing the establishing is conditional upon said determination being negative **(see Harada figure 7 boxes 11-13 and col. 7 lines 22-44 Determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as being negative)**. The motivation to do so is to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Regarding claims 20, Alperovich, Harada, and Witzel teaches the target in-path gateway being a first target in-path gateway, the method further comprising:

- responsive to said determination being positive **(see Harada figure 7 boxes 11-13 and col. 7 lines 22-44 Determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication and it would have been obvious to one of ordinary skill in the art to indicate that same coding type as being positive and different type as being negative):**
- identifying a second target in-path gateway from among the plurality of in-path gateways, the second target in-path gateway being the in-path gateway furthest along the path from the first gateway **(see Alperovich col. 6 lines 30 the physical geographical area of the available gateways may be divided into zones, and further into subzones, to allow the PSC server 37 to select a gateway in closest proximity to the end destination)** which is characterized by codec-bypass

connection compatibility with the first gateway and which is not involved in a codec-bypass connection with the second gateway **(see Harada col. 7 lines 9-44 and figure 7 boxes 11-13)**;

- establishing a codec-bypass connection between the first gateway and the second target in-path gateway instead of with the first target in-path gateway **(see Harade col. 9 lines 17-67)**. The motivation to combine is to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

6. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al., hereinafter Alperovich, (US6600738) in view of Harada (US7240000), further in view of Shaffer et al., hereinafter Shaffer, (US6324409), and further in view of Witzel et al., hereinafter Witzel, (US2010/0305943).

Regarding clams 22, Alperovich discloses a routing in an IP network based on codec availability and subscriber preference **(see Alperovich col. 1 line 52 to col. 2 line 51)** comprising:

- identifying a first sub-path between the first gateway and a first target in-path gateway from among the plurality of in-path gateways **(see Alperovich figure 5 and col. 6 lines 22-38 the possible pathways which may include not only the gateway(s) or paths chosen, but also the nodes between the end destination and the chosen gateway(s))**,
- the first target in-path gateway being the in-path gateway furthest along the path from the first gateway **(see Alperovich figure 5 and col. 6 lines 22-38 a call to be placed over the core IP network 16 of figure 1 for as long as possible)**

- identifying a second sub-path between the second gateway and a second target in-path gateway from among the plurality of in-path gateways, the second target in-path gateway being the in-path gateway furthest along the path from the second gateway **(see Alperovich col. 6 lines 30-35 the physical geographical area of the available gateways may be divided into zones, and further into subzones, to allow the MSC server 37 to select a gateway in closest proximity to the end destination)**

Alperovich discloses all the subject matter of the claimed invention with the exception of:

- which is characterized by codec-bypass connection compatibility with the first gateway;
- which is characterized by codec-bypass connection compatibility with the second gateway;
- determining the lengths of the first and second sub-paths;
- if the first sub-path is longer than the second sub-path, establishing a codec-bypass connection between the first gateway and the first target gateway;
- if the second sub-path is longer than the first sub-path, establishing a codec-bypass connection between the second gateway and the second target gateway.

Harada from the same or similar fields of endeavor teaches the use of:

- when mobile terminals belonging to different mobile communications systems communicate with each other, a communications path is established through gateways which interconnect the two mobile communications systems. Even if the

mobile communications systems employ the same speech coding process, a signal passing through a transit network is converted by a general-purpose speech coding process such as 64 kPCM unless the gateways and the transit network are compatible with the speech coding process of the mobile communications systems **(see Harada col. 1 lines 15-25)**;

- determining if same coding type and indication of whether it is the same type or not for coding-bypass communication or tandem communication **(see Harada col. 7 lines 9-44 and figure 7 boxes 11-13);**
- establish the bypass connection from the time a call is made **(see Harade col. 9 lines 17-67).**

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the same coding type and establishing a codec bypass connection as taught by Harada in the routing in an IP network based on codec availability and subscriber preference of Alperovich in order to reduce the load of IP network and increase the signal quality of speech **(see Harada col. 4 lines 13-34).**

Shaffer from the same or similar fields of endeavor teaches the use of:

- select result with most number of hops with compressed coding **(see Shaffer figure 6B box 662 and col. 9 lines 40-46),** which allows to determine the number of hops between two sub-paths and selecting result with the most number of hops or longer.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the selecting result with the most number of hops with compressed coding **(see Shaffer figure 6B box 662 and col. 9 lines 40-46)** as taught by Shaffter in

the modified routing in an IP network based on codec availability and subscriber preference of Alperovich and Harada in order to optimize telecommunication signal quality **(see Shaffer col. 3 lines 5-15)**.

Witzel from the same or similar fields of endeavor teaches the use of:

- controlling the establishment or modification of a connection for a subscriber having a subscription in a communication network is provided, which connection is to be established or modified between nodes that are adapted to employ a coding scheme selected from a plurality of supported coding schemes potentially affecting connection quality **(see Witzel paragraph 10)**.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the establishment or modification of a connection **(see Witzel paragraph 10)** as taught by Witzel and in the modified the routing in an IP network based on codec availability and subscriber preference of Alperovich, Harada, and Shaffer in order to maintain compressed voice saves core network bandwidth and optimizes speech quality **(see Witzel paragraph 4)**.

Regarding claims 23, Alperovich, Harada, Shaffer, and Witzel teach the further comprising:

- if the first sub-path is not longer than the second sub-path and the second sub-path is not longer than the first sub-path **(see Shaffer col. 9 lines 47-51 if there is another tie with results which allow the call to be made with the most number of hops with compressed coding(step 664 of figure 6B)**:

- determining the priorities of compatibility of the first target gateway with the first gateway and of the second target gateway with the second gateway **(see Shaffer col. 9 lines 49-51 then the tied results are analyzed and the one which is listed higher in the preference list of preferred coding methods is selected (step 666 of figure 6B))** and:
- if the compatibility of the first target gateway with the first gateway has a greater priority than the connection compatibility of the second target gateway with the second gateway, establishing a connection between the first gateway and the first target gateway **(see Shaffer col. 9 lines 49-55 then the tied results are analyzed and the one which is listed higher in the preference list of preferred coding methods is selected (step 666 of figure 6B))**;
- if the connection compatibility of the second target gateway with the second gateway has a greater priority than the connection compatibility of the first target gateway with the first gateway, establishing a connection between the second gateway and the second target gateway **(see Shaffer col. 9 lines 49-55 then the tied results are analyzed and the one which is listed higher in the preference list of preferred coding methods is selected (step 666 of figure 6B))**. The motivation to combine is to optimize telecommunication signal quality **(see Shaffer col. 3 lines 5-15)**.

Response to Arguments

7. Applicant's arguments with respect to claims 1-20 and 22-23 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's arguments, see Remarks page 9, filed 12/3/2010, with respect to Specification Objection have been fully considered and are persuasive. The Specification Objection has been withdrawn.

9. Applicant's arguments, see Remarks page 10, filed 12/3/2010, with respect to 101 Rejection have been fully considered and are persuasive. The 101 Rejection of claim 17 has been withdrawn.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Farber et al. (US2005/0232232), Kirla et al. (US2004/0254786), Bei et al. (US2003/0189720).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WUTCHUNG CHU whose telephone number is (571) 272-4064. The examiner can normally be reached on 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WUTCHUNG CHU/
Examiner, Art Unit 2468

/NATHAN FLYNN/

Supervisory Patent Examiner, Art Unit 2468